

ABUG

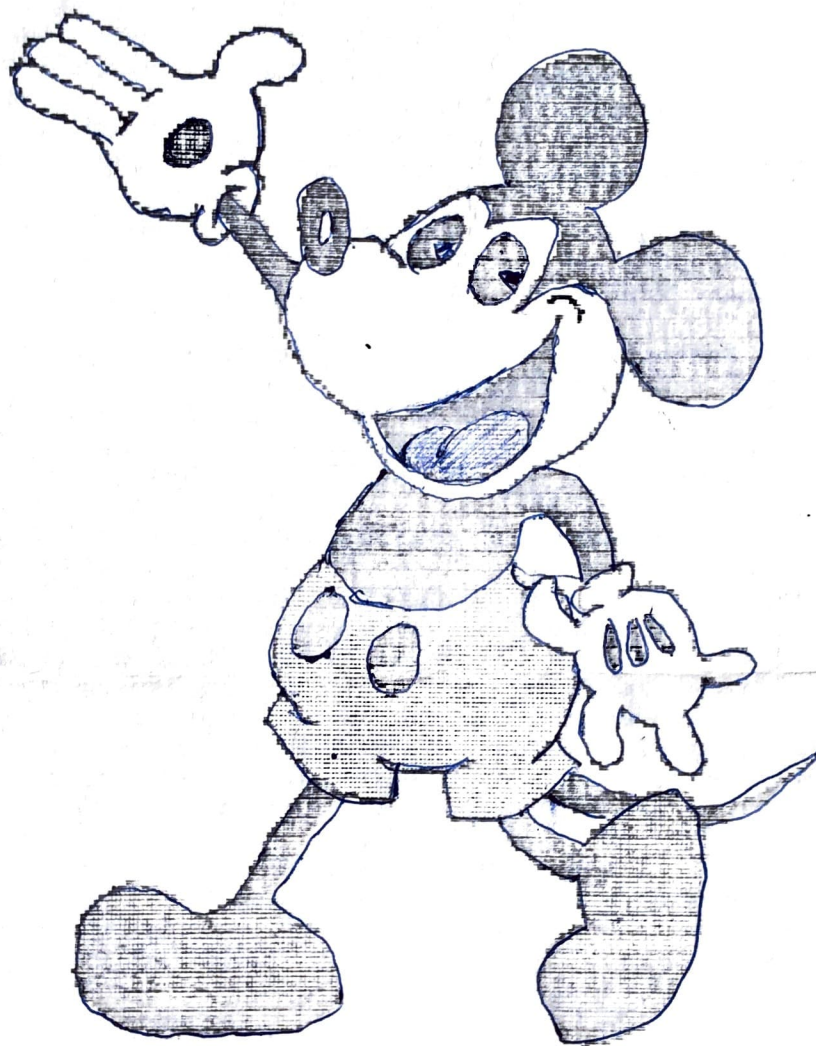


ACORN & BBC
microcomputers
USER GROUP
Sheffield

please reply to:-

NEWSLETTER NO. 10

November 16th, 1983.



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Diary

Meetings to the end of March 1984

December 7th	(Farfields)	Social evening
December 21st	(Park Baths)	Christmas Festivities
January 4th	(Farfields)	Social evening
January 18th	(Park Baths)	BBC Buggy demonstration
February 8th	(Farfields)	Social
February 22nd	(Park Baths)	Workshop
March 7th	(Farfields)	Social
March 21st	(Park Baths)	Communications

One piece of good news this month is that Just Micro, the new computer shop in Carver Street, has agreed to give members a 5% discount on software on production of a membership card.

The bad news is that in one months time the current subscription year for the club comes to an end and subscriptions for next year are due. The rate for a full year is being kept at £8 (£4 for under sixteens) and we are also introducing a family membership so that additional members in the same family only pay £2 each.

As there is no formal presentation arranged for the December meeting, a software competition is being set this month and entries will be demonstrated and judged at the meeting on December 21st. The brief for the competition is very simple; Christmas Connections. Entries may consist of games, graphics, sounds, music or any combination, but must be original work. Judging will be equally simple; popular acclaim on the night. The prize for the outright winner is £10, so get busy. If there is a good response then perhaps competitions with more constraints might be organised in the new year. Any ideas?

As a result of our appeal last month we acquired an even better screen dump for the Epson printer which shades all colours differently. The picture on page one is a reprint of last month's illustration using this routine.

LIBRARY

Since last month four new additions are being made, two books and two programs.

Advanced Graphics with
the BBC Model B Microcomputer ... I.O. Angell & B.J. Jones

Advanced User Guide Bray, Dickens & Holmes

French Mistress program covering basic French vocabulary
tuition and testing, with facilities to create
user files of words

Hobbit adventure program based on the characters
created by J.R.R. Tolkein. There is a large

vocabulary and the game is played in real time; it does not stop while you are thinking!

Disk Upgrades

The advantages of a disc system over cassette are immediately obvious. A drastic reduction in loading and saving times plus access to all the filing system commands, and the facility for random access filing. A lot of members already seem to have disc systems, but even more seem to be thinking of taking the plunge after seeing them in operation, and we thought it would be timely to write a review of the current state of the disc market.

The first step to make towards a working disc system is to obtain a disc upgrade for the computer. Perhaps the easiest - and by far the most expensive - way is to go to a dealer and ask for the Acorn upgrade to be fitted. Three months and £130 later the job will be done. Alternatively you can buy and fit your own upgrade from a kit or buy all the components separately. There are several kits around which are all identical excepts for the disc filing system (DFS) which is included. This is the software which runs the the disc drives, implements the filing system commands and generally makes the use of the discs a painless process. There are four versions available at the moment; the official Acorn DFS, Watford Electronics, Pace (Amcom), and C.U.C. (computer users club). A review of the relative merits of these was published in the September issue of The Micro User and is worth reading although it should be noted that both the Pace and Watford DFS have been improved since then. In particular, the speed of the Pace is now comparable with the others. The C.U.C. DFS is closely similar to the Acorn one. The Watford DFS is by far the best of the four but is also the most expensive and unfortunately is incompatible with some software written for or saved by the Acorn system. Most of the problems are resolveable, but if you have no need for the extra sophistication offered by the Pace and Watford Systems, it would be easier to stay with the Acorn or C.U.C. (this is the cheapest D.I.Y. upgrade at £75 inc. VAT). One further point worth noting is that if you have an issue 3 board or earlier then all except the Pace systems require some minor surgery to the board. Someone in the club will do this for you for a nominal charge (approx. 1 pt. of lager) but if you would rather not do this then the Pace system is for you.

An even cheaper option is to buy the components yourself. The disk upgrade consists of just eleven chips, one of which is the 8271 disc controller and another is the DFS. The 8271 is now fairly easy to obtain for around £36 and the remainder (excluding the DFS) cost a total of around £5. The DFS will then have to be bought separately. We can give a list of the chips required to anyone who is interested.

For the future, at least two companies are about to bring out a double density upgrade. This has nothing to do with the double density drives discussed below but rather doubles the number of segments on the disc. The old 8271 chip used by Acorn can not do

this and is replaced on a carrier board by the more modern 8272 controller. The net effect is to almost double the capacity of any disc drive. It must be borne in mind however that these discs will then be incompatible with standard drives. There is also some doubt as to whether some of the ROM expansion boards will fit with the 8272 carrier board and whether it will be possible to use the standard DFS. Anyone tempted by these upgrades would do well to wait a few months and see what the problems are.

With the upgrade fitted the next decision is on disk drives and there is now a wide choice. Two formats are available; 40 track and 80 track (100 K and 200K respectively on standard upgrade). Both of these come on single sided and double sided versions, singly and in pairs. Prices range from £120 for a single, 40 track, single sided drive to £800 for a high quality, 80 track, double sided double drive.

There is no doubt that having two drives is far more convenient, especially for copying discs but since it almost doubles the price this must be considered a luxury for the domestic user. With current prices the 40 track versions only make sense if you know you will have only a very limited use for the drive. If you buy just two boxes of discs then the saving on discs is the same as the price differential between 40 and 80 track drives (80 track discs hold twice as much for considerably less than twice the price). Because of this it seems that the 80 track version will probably become standard over the next year or so. There is also the advantage that it is possible to read 40 track discs on an 80 track drive but not vice versa.

Which of the many drives available is the most suitable depends on how much you believe the advertisements and how much money you have available. Several members have the double sided TEAC drives from Viglen (£251 inc. VAT) and these seem as near ideal as possible, but ultimately it is reliability that matters and none of the drives has been around for long enough for a fair trial.

There are also several other formats around which as yet have made little impact on the market. There are a few 35 track drives for sale at very low prices and for the dedicated they could be an economical option. There are also several versions of the new 3" drives available. These offer several advantages especially from the more robust discs but as yet there seems to be no agreement on a standard format and they are considerably more expensive than the 5 1/4" drives. Anyone buying discs for the first time is probably well advised to avoid all these alternatives until the situation is clarified.

Wordwise

The use of some of the embedded commands for controlling the printer output can have some unexpected (and unwanted) results. This is particularly apparent with the underlining function. Wordwise underlines left margins if the underlining command is in the previous line. With a single line of text, the command should be put directly at the beginning of that line and all is

well. However, underlining of several consecutive lines does create problems. The left margins will be underlined and at the moment the only solution appears to be to use the preview option to determine the end of each line and turn the underlining off and then back on again.

Underlining of centred text presents a similar problem. The solution is to use the centre text command, then go to the preview option, calculate the position of the text and use the temporary indent command (TI) to position the text.

These are very tedious procedures and we understand that Computer Concepts are aware of these shortcomings. If we have news of any significant upgrades to Wordwise we will include the information in the newsletter. Meanwhile, if anyone has better solutions to these problems or has other problems (and answers!), please let us know.

A very minor difficulty can arise with the use of the tab facility. Multiple tab stops need to have a space between each tab command.

Advanced User Guide for the BBC micro

A copy of this book is now in the library and is highly recommended for anyone looking for detailed information. There have been several reviews praising the book and these seem to be well deserved, but there are a few criticisms.

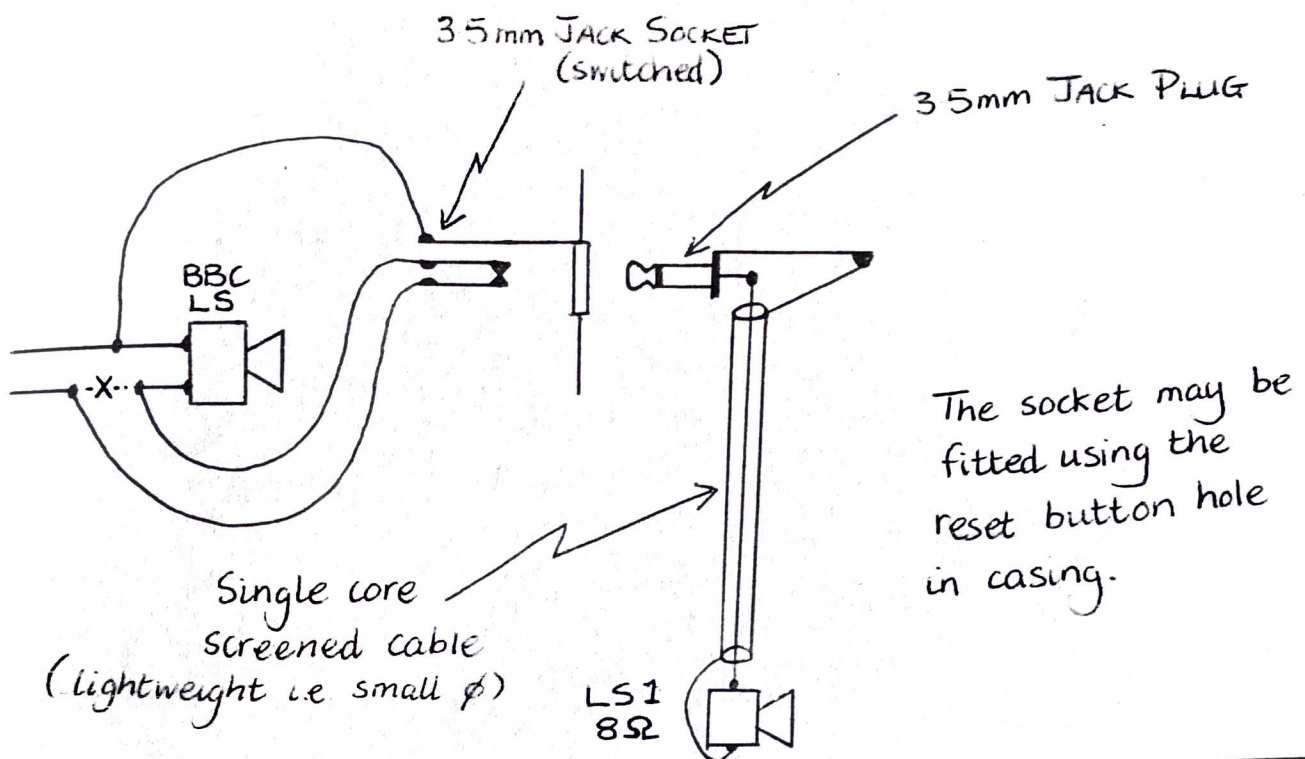
There are two main 'hardware' snags with the book. Firstly, the spiral binding, as with the standard user guide, becomes deformed with use and is poor considering the price of the book. Secondly, the holes for the spiral binding destroy some of the index references; a fundamental flaw in an index system! This is such a silly fault which could have been so easily overcome.

The only 'software' error found so far is the reference to OSFILE on page 335. The call address should be &FFDD not &FFCE as shown (This call address is OSFIND). However the call addresses are all listed in appendix B. The only other comment at the moment is that no opcodes are included in the assembly language section.

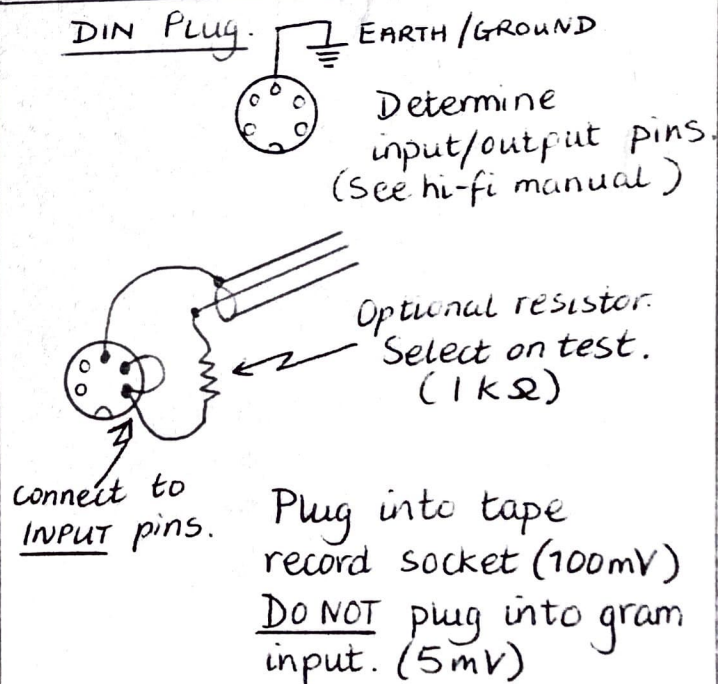
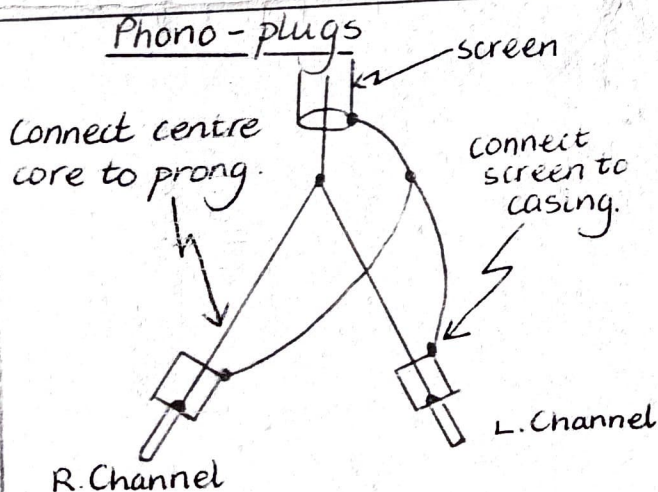
You need to refer to pages 508-509 in the standard user guide, and this table is only for those with keen eyesight.

Some of these faults are so fundamental that we intend writing to the publishers and so if you have any other comments then please let us know before we write.

BBC Micro - Extension Speaker socket



Connecting the BBC to Hi-fi system.



Courtesy of A. Willis.